

REMARKS

Claims 1-100 are pending¹. Claims 1 and 4-100, due to a restriction requirement, are withdrawn from consideration. Claims 2 and 3 are rejected under 35 U.S.C. § 112, first paragraph and under 35 U.S.C. § 102. Applicants address each of these rejections as follows.

Claim Amendments

Claim 2 has been amended to be directed to an isolated nucleic acid molecule that includes the sequence of SEQ ID NO:2.

Claims 1 and 4-100 have been canceled.

The claim amendments contain no new matter.

Objection to the Specification

The Office objects to the specification for containing an embedded hyperlink. In addition, the Office objects to the title as not being descriptive of the claimed invention. Applicants submit that the amendments to the specification and to the title overcome these bases for objection.

Support for the amendment to the title may be found, for example, at page 17, lines 23-26, of the specification. No new matter has been added by this amendment.

¹ The January 5, 2006 Office Action states that claims 1-6 are pending. Applicants submit that this statement is in error.

Sequence Compliance

The Office asserts that the specification discloses sequences that have not been identified by a sequence identifier. In particular, the Office notes that the sequences in Figures 15B, 15D, 15F, 15H, 15J, 15L, 15N, and 15P have not been assigned sequence identifiers. The specification has been amended to include sequence identifiers in the Brief Description of the Drawings for the sequences shown in Figures 15B, 15D, 15F, 15H, 15J, 15L, 15N, and 15P. Support for this amendment is found, for example, at page 10, line 31, to page 11, line 5, of the specification. The amendment contains no new matter. This basis for objection may be withdrawn.

Applicants note that the Sequence Listing filed with the application on January 16, 2004 contains the sequences shown in Figures 15B, 15D, 15F, 15H, 15J, 15L, 15N, and 15P as SEQ ID NOS:32-39.

Nonetheless, in response to the Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequences and/or Amino Acid Sequence Disclosures, Applicants, with the concurrently filed Statement under 37 C.F.R. § 1.821, submit a substitute computer readable form of the Sequence Listing, a substitute paper copy of the Sequence Listing, and a statement that the content of the paper copy and computer readable form of the Sequence Listing are the same and contain no new matter.

Rejection under 35 U.S.C. § 112, first paragraph

Claims 2 and 3 are rejected under 35 U.S.C. § 112, first paragraph, for an asserted lack of written description and enablement in the specification, as filed. In particular, the Office states (page 5):

[I]n the absence of sufficient recitation of distinguishing identifying characteristics, the specification does not provide adequate written description of the claimed genus.

And states (page 6):

[T]he specification, while being enabling for the nucleic acid sequence set forth in SEQ ID NO:2, for example, does not reasonably provide enablement for any fragments thereof.

Applicants submit that claims 2 and 3, as amended, are free of these bases for rejection. As noted above, claim 2 has been amended to be directed to an isolated nucleic acid molecule including the sequence of SEQ ID NO:2. The specification, as filed, describes this isolated nucleic acid molecule, for example, at page 17, line 22, to page 18, line 13, and in Figure 5A. Moreover, the specification, for example, at page 15, line 1, to page 41, line 24, describes how one skilled in the art can make and use the presently claimed nucleic acid molecules. There can be no question that the specification describes the presently claimed invention and also enables its use. As such, the 35 U.S.C. § 112, first paragraph rejection of claims 2 and 3, as amended, should be withdrawn.

Rejection under 35 U.S.C. § 102(b)

Claims 2 and 3 are rejected under 35 U.S.C. § 102(b) as being anticipated by WO 98/50555. In particular, the Office states that WO 98/50555 teaches “a sequence that is 99.9% identical to the nucleic acid sequence set forth in SEQ ID NO:2.”

To anticipate a claim, a single prior art reference must expressly or inherently describe each and every element set forth in the claim. Claim 2, as amended, requires the isolated nucleic acid molecule to include the sequence of SEQ ID NO:2. As WO 98/50555 does not describe the sequence of SEQ ID NO:2, Applicants submit that WO 98/50555 cannot anticipate claim 2, as amended, and its dependent claim. This basis for rejection should be withdrawn.

CONCLUSION

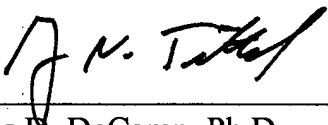
Applicants submit that the application is now in condition for allowance, and this action is hereby respectfully requested.

Enclosed is a Petition to extend the period for replying to the Office Action for three (3) months, to and including July 5, 2006, and a check in payment of the required extension fee.

If there are any additional charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

Date: 5 July 2006



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